The replies to the pre-bid queries Meeting held on 28-10-2024

Sub: Supply, Installation, Testing and Commissioning and maintenance of Motion based Heavy motor vehicle simulator.

Ref: Tender No.BMTC/2024-25/IND0119.

SL.NO	DESCRIPTION	PAGE No	MANUFACTURER REQUEST/FEEDBACK	Reply
1	General Requirements- points no: 3.(3DOF /6DOFmotion platform)	1	a. Buyer has provided the option for choosing the 3DOF/6DOF in the platform. b. Integrating the motion system for the entire platform is a no ld European design, in which it is has many demerits(no.ROI, driver motion sickness, long term operation, maintenance, service, civil work, expensive spares, current consumption) and not shown the success rate so far with our14 years of experience in the field and customer feedback. c. The recent trend and proven technology - integrating the 3 DOF in the driver seat, thus driver gets the actual feel of the road -slippery decline/incline/speedbreakers/turning/braking/potholes/acceleration. d. Integrating the motion below the seats provides the effective feel and experience than integrating for an entire platform. e. Thus, we request to amend the motion system integration for the driver seat only.	Please adhere to the revised technical specifications
2	Driver cabin– 1.1.8(Gear shifter)	2	a. It is mentioned as only the single gear shifter to be used and there should not be any hardware to be changed for various bus selections. b. Thus, we are providing the gear box shift lever with 5-speed, 6-speed and fully automatic only. (3 selection modes only)	Please adhere to the revised technical specifications
3	Driver cabin– 1.1.4(Steering wheel)	2	a. Steering wheel will be of actual bus steering which is mounted to an electrical steering control unit in a direct shaft. b. In the real vehicle the steering is mounted on the rack and pinion . further only LMV has the reach and angle adjustment not the HMV's. c. Thus, we are adopting with the HMV real feel in which driver needs to adjust the seat up/down and slide front/back for his seating comfort.	Please adhere to the revised technical specifications

CME

COSP

SL.NO	DESCRIPTION	PAGE No	MANUFACTURER REQUEST/FEEDBACK	Reply
4	Visualization system– 1.2.1 (seasonal effects)	3	a. Seasonable effects will be created to provide an actual feel for the driver w.r.t the lands capes /people /trees /environment /road surface in a replica way and not in an actual way what is seen naturally.	Please adhere to the revised technical specifications
5	Visualization system– 1.2.6 (display)	4	a. 3screen or above with 48+screen size for all display.	Please adhere to the revised technical specifications
6	Instructor station – 2.1 (hardware)	4	A. Controlling of 10+machines with single tutor station will be possible for the same software working machines and not different machines.	Please adhere to the revised technical specifications
7	Instructor station application 1.2.11&1.2.12	6	a. This is a system-oriented technology training devices, semi-skilled system knowledgeable person is required for effective handling and providing professional guidance to the operator.	Please adhere to the revised technical specifications
8	Editmode– 1.3.	6	a. Instructor can design/change the lessons / hazards / environment / vehicle technical parameter for the operator based on the options available in the manufacturer provided data base.	Please adhere to the revised technical specifications
9	Simulation scenes -1.4.2, 1.4.3& 1.4.4	7	a. RealisticIndianenvironmentin4Kresolution b. All road marking and signs will be of Karnataka based rural area names in Kannada language. c. Urban scenario provided will be of replica of Bangalore based roads, land markings, buildings.	Please adhere to the revised technical specifications
10	Outside environment (1.5.6)	7	a. Passenger deboard and debark only can be done at bus stops. b. Running/chasing/footboard travelling – hence it is an professional training simulator passenger behaviour can't be done, in which it becomes like an gamming.	Please adhere to the revised technical specifications
11	Incidents- 1.7	8	a. The list of incidents mentioned are to be done by the driver only, simulator can provide verbal instructions and printed results for all the mentioned.	Please adhere to the revised technical specifications

CME Dy CoSP

SL.NO	DESCRIPTION	PAGE No	MANUFACTURER REQUEST/FEEDBACK	Reply
12	Exhaustive data base	12	a. Since it is not a real vehicle and driving 200km of roads with 70 cross roads simulation will make the drive fatigue and drowsiness due to the display radiation and motion platform. b. Further creating the huge realistic data base for 200kms with all land marks road conditions and vegetation are not possible with the available commercial grade computers. c. So, we request to amend for 20km with 15cutroads.	Please adhere to the revised technical specifications
13	Drive and replay mode	13	a. Addental replay will be viewed in 2dimensional angles for educating and fault identifying.	Please adhere to the revised technical specifications
14	Risk awareness module	14	a. Buyer to describe more detailed on the(a&b)	Please adhere to the revised technical specifications
15	Driver camera screen	15	a. Buyer to describe more for better understanding the possibilities.	Please adhere to the revised technical specifications
16	Vehicles to simulate	16	a. Buyer to describe the uses on the various - Vehicle selection - Emission selection - Manufacturer selection - Engine selection - Transmission selection - Power selection b. Since technology is rapidly changing to EV's, Hydrogen, trolley and bio fuels. buyer to detail on selecting the above.	Please adhere to the revised technical specifications

CME (I/C) **Dy.CAO** **COSP**